DOCUMENT RESUME

ED 240 447 CG 017 277

AUTHOR Field, Dorothy; Weishaus, Sylvia
TITLE Consistency of Personal and Intellectual Characteristics over Half a Century.
PUB DATE Aug 83
NOTE 34p.; Paper presented at the Annual Meeting of the International Society for the Study of Behavioral Development (Munich, West Germany, July 31-August 4, 1983).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Cognitive Processes; Intelligence; Life Satisfaction; *Longitudinal Studies; *Older Adults; Personality Studies; *Personality Traits; Psychological Characteristics; *Reliability; Self Esteem; Sex Differences; Social Characteristics
IDENTIFIERS Berkeley Growth Study; *Stability (Personal)

ABSTRACT

Although the consistency of personality characteristics has been identified in groups of persons studied from infancy into young adulthood, few such studies have been able to include older adults. To investigate the stability of personality and social characteristics among young-old and old-old adults, 72 adults (51 female, 21 male) from the Berkeley Growth Study group were rated on 21 personal-social characteristics through intensive interviews. The subjects were initially interviewed using these characteristics in 1928 (young adults), and again in 1968 (young-old adults) and in 1982 (old-old adults, with an age range of 73 to 93 years). In 1982, the mean Wechsler Adult Intelligence Scale IQ for the group was 119. An analysis of the results showed a considerable amount of stability across the 50-year time span, particularly for cognitive characteristics. Intelligence, accuracy of thinking, poise, and talkativeness maintained strong and significant correlations for both men and women across time. In addition, both men and women became less restless, less critical, less worrisome, less excitable, more interested in their children, and had an increased sense of self-esteem in the transition from young-old to old-old age. In cognitive variables and life satisfaction, men tended to score higher than women, while women tended to score higher than men in personal-social characteristics. (BL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED240447

CONSISTENCY OF PERSONAL AND INTELLECTUAL CHARACTERISTICS OVER HALF A CENTURY

Dorothy Field
University of California/Berkeley
Institute of Human Development
Sylvia Weishaus
Pennsylvania State University

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☒ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Dorothy Field

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CG 017277

Paper presented at meetings of the International Society for the Study of Behavioral Development, Munich, West Germany, July 31-August 4, 1983.

Consistency of Personal and Intellectual Characteristics Over Half a Century

Dorothy Field and Sylvia Weishaus
The Pennsylvania State University
and
Institute of Human Development
University of California Berkeley

Personality characteristics are commonly considered to be stable over long periods of time and under a wide variety of circumstances, yet some recent theorists have questioned this view. For example, Mischel (1968), while recognizing the longitudinal coherence of personality, questions the cross-situational generality of behavior. Bem and Allen (1974), found, in addition, important individual differences in cross-situational variability of behavior. The issue of stability of dimensions across adulthood can only be resolved with the aid of long term longitudinal studies of adults. Until recently such studies were not available.

It is true that consistent personality characteristics have been identified in groups of persons studied longitudinally from infancy or childhood into young adulthood. For example, Bronson described substantial continuities in the traits of emotional expressiveness and reactivity-control from childhood through adolescence (1967) and into young adulthood (1972) in the Guidance Study members. Tuddenham, (1959), studying the Oakland Growth Study members from adolescence into their mid-30s, found the most stable variables to be expressiveness and expansive spontaneity versus inhibition,traits similar to those found

---

Paper presented at meetings of the International Society for the Study of Behavioral Development, Munich, August, 1983.

stable by Bronson. Similar findings were reported by Kagan and Moss (1962) for the Fels group, studied from infancy to young adulthood. Block and associates found considerable individual differences in consistency of personality of Oakland Growth Study Members from early adolescence into their 30s (Block, in collaboration with Haan, 1971) and the 40s (Block, 1981): some people were "impressively predictable" and others "unrecognizable" over those time spans.

An examination of stability of personality and social characteristics across adulthood into old age has not been possible until recently, because of the paucity of longitudinal studies of aging persons. Some stability has been found over shorter time periods (4 to 15 years) in the participants of the Bonn (Gromback, 1976; Thomae, 1976; Thomae, Lehr, & Schmitz-Scherzer, 1981), the Duke (Siegler, George, & Okun, 1979), and the Baltimore (McCrea, Costa, & Arenberg, 1980) longitudinal studies of aging. In addition, a group of women, mothers of the Guidance Study children, rated on intellectual and personality-social characteristics when their children were infants and again 40 years later (Field, 1982; Mussen, Eichorn, Honzik, Bieber, & Meredith, 1980), showed impressive consistency in intellectual functioning and in many personality-social characteristics as well.

The study reported here describes the first results of the recently completed intensive interviews of the surviving mothers and fathers of the Guidance Study and Berkeley Growth Study members, Institute of Human Development, University of California, Berkeley, who are themselves members of the Berkeley Older Generation Study. A set of ratings of personal-social characteristics were made in young-old age and again in old-old age of both men and women. In young adulthood the ratings were made for a sub-set of the women (Mussen et al, 1980)

as well.

It is thus possible to examine consistency in these characteristics in the important transition from young-old to old-old age for both men and women and over a period of more than 50 years in the adulthood of a group of women.

Method

Subjects

The subjects are the surviving members of the Berkeley Older Generation Study, Institute Of Human Development, University of California, Berkeley, who were interviewed and rated on the "parents characteristics" in 1968-1969: young-old age (YO), and in 1982-1983: old-old age (OO). There are 51 women and 21 men. Twenty four of the women also were rated on these characteristics in 1929-1930: yound adulthood (YA), and an additional 18 women were rated on 12 of the 21 characteristics in YA. They are the parents of the Guidance Study children, a sample of every third baby born in Berkeley in 1928-1929, a study directed by Jean Macfarlane (1938), and the Berkeley Growth Study children, a smaller, more intensively studied group of Berkeley children of the same birth years and similar SES studied by Nancy Bayley (1933) (also see Eichorn, 1981). The original group of parents was very similar to their national census cohort at that time, differing only as might be expected in a college town: they had more education and more labor-saving appliances in their homes, but their incomes were lower (Eichorn, 1973). Although attrition was to some extent selective, they are nevertheless broadly representative of surviving persons of their cohort. Every educational level is represented, as is every occupational level. Compared with GS and BGS parents who are not in this surviving group, they show a slight

tendency to have experienced less financial strain when their children entered the study or when their children were 17. A trend toward higher SES and education is observed. The occupations of these men are significantly higher than those of the men not represented here. The mean birth year is 1900, and ages range from 73 to 91 for the women and 74 to 93 for the men. The mean IQ (WAIS) of those who have been tested at this writing is 119, s.d. 15.4.

Rated Characteristics

The 21 "parents characteristics" were originally selected and defined by Macfarlane (1938) more than 50 years ago for the GS parents. Because the GS had an interactive "biosocial" orientation, these characteristics reflect this stance, and are not, for the most part, strictly personality traits. The original ratings were made because the parents were in fact parents of the study children, therefore the characteristics chosen were thought to be critically related to the children's development and guidance. All ratings were based on behavioral and "common sense" scales, so that the different groups of raters, making their judgments up to 50 years apart, seem to have understood them similarly. This fact may have facilitated the high correlations obtained across the years and across the differing theoretical backgrounds of the raters. All 21 ratings are on a 7-point scale; a score of 1 designates the highest rating. The characteristics are listed in Table 1. The YA ratings were made only of the Guidance Study women--all 21 ratings for the Guidance subgroup and 12 of the same ratings for the Control group. All men and women were rated on all 21 characteristics in YO and OO.

The YA ratings are averages of ratings made on several occasions between 1929 and 1933 by IHD researchers who were familiar with the parents (Macfarlane, 1938). The YO and OO ratings were made by the

psychologists who conducted these interviews immediately after they completed the intensive 3 to 4-hour interviews. All interviewers were"blind" and had no prior information about the subjects of their interviews.

Analysis

Pearson product-moment correlations were the first level of analysis: each rating was correlated with the comparable rating at each time comparison to assess the stability of each variable across time. Men's and women's ratings were assessed separately. In addition, t-tests were used to examine change over time for both men and women and to compare men and women at each time.

Finally, because many of these variables are intercorrelated at each of the life periods, it seemed desirable to determine whether there might be a smaller number of underlying dimensions. Ordinary methods of factor analysis are not suitable because they cannot take into account the repeated measures nature of the data. Repeated measures of the same variables on the same individuals clearly cannot be said to be independent. Fortuantely a solution to this problem for the small sample case has recently been developed by Meredith (1983), a component analysis that is able to deal with more than one time period in a single stationary analysis in which the factors of each time are rotated to provide the maximum fit over time. This component analysis is likely to produce better results with small samples than the stationary factor analysis he has used for longitudinal analyses of larger samples (Mussen et al, 1980). Through this analysis, stationary factors, common to two or three time periods, can emerge.

Results

Consistency Across Fifty Years

Table 1 shows the three comparisons we can make of the women's ratings: the nearly 40 years between YA and YO, the 13 years between YO and OO, and the over 50-year span between YA and YO.

All 78 survivors are compared with the 67 who have died since the YO interview on all 21 characteristics rated at that time. At YO, the surviving women were rated significantly ($t(90) = 2.68$, $p < .01$) better in personal appearance and the surviving men significantly more satisfied with their lot ($t(49) = 2.44$, $p < .02$). No other characteristics distinguish the deceased from the survivors.

Women: Young adulthood and young-old age. Table 1 shows that all the cognitive variables are consistent over the 40 years, with correlations of .34 to .61. Four personality characteristics also show significant stability across those years. Two of these, poise and talkativeness, also are stable in the later years and also for the men.

Women: Young adulthood to old-old age. As Table 1 shows, consistency is less strong across more than half a century. Two of the cognitive ratings still are significantly correlated, for this is a very stable characteristic, but the stability is somewhat reduced. Five personality characteristics show significant stability over all these years. Talkativeness appears to be an exceptionally consistent trait.

Women: Young-old to old-old age. We are particularly interested in the transition between young-old and old-old age, as measured by interviews 13 or 14 years apart. Although the cognitive ratings as a whole did not show as much consistency as they did earlier, still the ratings of intelligence and accuracy of thinking are stable. In

addition, eight of the personal characteristics are significantly stable over this period, and the ratings of talkativeness, poise, self esteem, and openmindedness show stability in this period of critical change.

Men: Young-old to old-old age. Because the men were not rated in YA, only this one comparison can be made. Table 1 shows very strong consistency in the ratings of cognitive functioning. Among the personal characteristics, restlessness and self esteem are stable between YO and OO. Four others, which are significantly correlated for the women, would also have reached significance for the men if their sample size equalled that of the women.

Comparing the Ratings at Each Period.

The correlations reported above examine the standing of each of the study members relative to the others at each time period. Therefore they tell us only of stability of individual differences across time. A second question of interest is whether the ratings of the group as a whole change in magnitude over time.

Figure 1 delineates the changes over time as measured by repeated measures anova for the women and correlated t-test for the men. Each of the time comparisons is also set out in Tables 2 and 3.

Change for the women. The cognitive variables show strong consistency across more than 50 years: mental alertness and accuracy of thinking increase significantly across adulthood, and the other three remain stable. In addition, significant linear or quadratic increases, and in some cases both (see Figure 1), are observed for personal appearance, freshness, poise, satisfaction with one's lot, interest in child, self esteem, and frankness; at the same time the women improved in the qualities of restlessness, criticalness, worrisomeness, excitability,

and criticality of their children.

Change for the men. The ratings with significant changes are shown in Figure 1 and Table 3. Unlike the women, the men were rated significantly lower in OO on two of the cognitive variables, intelligence and use of language, and somewhat lower for two other cognitive ratings as well. As for the personal characteristics, the changes duplicate those of the women: less restless, less critical, less worrisome, less excitable, but more interested in their children and with an increased sense of self esteem.

Comparing men and women. Because men and women were rated both in YO and OO, two sets of comparisons can be made, as shown in Table 4. In YO the men were judged significantly higher in four of the five cognitive variables and also were judged to be higher in satisfaction with one's lot. Women were more interested in the children and more excitable.

In OO men still were judged significantly higher on one of the cognitive variables and somewhat higher on three others. Although both men and women were judged less restless, less worrisome, and less excitable in OO than they were in YO, still the women were significantly higher than the men in these ratings in OO. The increase men experienced in self esteem in OO contributed to their significantly higher rating than that of the women in OO.

Because four is nominally the average rating in a 7-point scale, it must be noted that both men and women in their older years were rated very favorably on all variables. If one reverses the ratings for variables 9, 10, 12, 13, 15, and 16 so that all variables are scored with 1 as "best", the mean of all ratings in YO is 3.38 for the men and 3.56 for the women. In OO the similar means are 2.92 and 3.18.

On average, the men were rated "better", but these small differences are not significant.

Analysis of Stationary Components

Finally Meredith's (1983) method of finding stationary factors yields some interesting results. A 5-factor solution yields the best results for all analyses. It must be emphasized that because the Ns are so small, this can only be considered an experimental procedure and a tentative solution, but for the most part the factors make some psychological sense, and the root mean square residuals in all analyses are acceptable.

Table 5 presents the 5-factor solution for the 24 Guidance women who were rated at all three times on all 21 variables. The first factor is clearly centered around intellectual characteristics: all of the cognitive functioning variables appear, plus quality of openmindedness. The second factor is an energetic woman: critical, talkative, restless, and excitable. The third factor describes a woman who is probably admired by her cohort: poised, pleasing in appearance, satisfied with her lot, high in self esteem, and not restless or worried. On the other hand, she is not openminded nor is she frank in discussion. The fourth factor describes a complainer: she is critical of her child although she has little interest in this child, she has little energy and little satisfaction. The fifth seems to describe an extrovert: she is cheerful, frank, open minded, fresh and full of energy.

Table 6 extends these tentative findings by presenting the results of an analysis of stationary factors over two time periods, YO and OO, only. The advantage of this approach is that all 51 women can be included in the analysis. As can be seen, the results, although not identical, are quite similar through all five factors. The consistency

between these two analyses is reassuring.

Table 7 shows the analysis for the 21 men over two time periods, YO and OO. The first factor again is an intellectual one. The second describes a man who is content with himself and with life: high in self esteem, energy, cheerfulness, freshness, satisfaction, and interest in child, he does not worry -- the perfect retired man, perhaps. The third factor may describe a man who is not happy in retirement: although his personal appearance is notable, he is negative in other attributes of cheerfulness, openmindedness, and freshness, while being critical of things in general. The fourth sounds a very tentative sort of man: tired, seeking to stay out of the way, yet still mentally alert. The final men's factor describes a man who may be unwell: little energy and slowing down mentally, phlegmatic, and low in the rating of personal appearance. The larger root mean square residual for the men's analysis indicates that this is not as satisfactory a solution as that for the women, perhaps because of the smaller number of men available.

Discussion

Have we found stability? We suggest that we have found a considerable amount. The cognitive characteristics are the most stable, of course, consistent with other, shorter term longitudinal studies of younger (Bayley, 1968) and older (Owens, 1966; Schaie, 1980) adults.

Impressive stability is also shown in our stationary components, and the similarity of the factors found in each of the three analyses increases the credence we may place in them.

McCrae et al (1980) examined personality characteristics in the men of the Baltimore longitudinal study at three times in approximately 12 years. They did not have access to this new method, and they used three separate principal component analyses, each containing different numbers of men. In each analysis three factors remained quite similar over time. The factors were more stable than the individual variables. This is the case in our study as well, with only two intellectual characteristics, intelligence and accuracy of thinking, and two personality characteristics, poise and talkativeness, maintaining strong and significant correlations for both men and women across time. The stationary analyses yield factors that have more depth and breadth of description.

We are also interested in changes in the ratings over time. Because data collection was so recently completed, we have not yet been able to examine the situational changes that may be associated with the changes in personal characteristics. Many changes are commonly considered to be associated with the transition from young-old to old-old: decrements in health, mobility, social roles, availablity of friends, activities, contact with the extended family, and so on.

Our study members have also experienced many losses, as do most people of their age. However, it is unlikely that these losses led to the changes we observed because our study members were rated better at the older age than at the younger!

Why are they rated so favorably? A rater effect is possible, although there is no specific evidence for one. Indeed, the fact that the women went up and the men went down in the cognitive ratings in OO shows that the interviewers were not indiscriminately bestowing higher ratings on these older subjects. It is possible that the interviewers responded with these positive ratings because the study members are in such sharp contrast to the usual stereotypes of very old people: the sick and the poor. Yet the interviewers themselves have a mean age of 64.6, and they are experienced with many kinds of old people.

Pending more complete analysis, we offer the suggestion that these people really have improved in these intellectual and personality characteristics. The mean IQ of 119 reflects an independent assessment that corresponds closely to the cognitive ratings. The interviewers often came away with strong feelings about the people they interviewed; often they were inspired by the ways these people had dealt with the circumstances of their lives and by the wisdom they brought to bear on their contemporary problems.

Particularly striking is the way that the study members have "settled in" during their later years. They are highly significantly less restless, critical, critical of their children, excitable, or worrisome in old age. These results may indicate that they have passed through Butler's (1963) stage of reminiscence and have come to terms with their lives. Certainly it is congruent with the responses we got to one of our final questions, "Looking back, what things would you do

differently if you had your life to live over again?" Most of them replied that they were content with the way they had lived and would change little if anything.

Finally, we suggest that we can generalize from these findings to other people of this age, who also are survivors in the same sense. It is true that the Berkeley group has been more blessed economically than the average in the United States, and no doubt this has eased many of their problems. The issue of stability of personality, however, is far more general than any influences of SES, and we predict that other studies in the future will find stability and consistency in personal characteristics over half a century.

References

Bayley, N. Mental growth during the first 3 years. A developmental study of sixty-one children by repeated tests. Genetic Psychology Monographs, 1933, 14, 1-92.

Bayley, N. Cognition and aging. In K.W. Schaie (Ed.) , Theory and methods of research on aging. Morgantown, West Virginia: West Virginia University Library, 1968. Pp. 97-119.

Bem, D.J., & Allen, A. On predicting some of the people some of the time: The search for cross-situational consistencies in behavior. Psychological Review, 1974, 81, 506-520.

Block, J. Some enduring and consequential structures of personality. In A.I. Rabin (Ed.) Further explorations in personality. New York: Wiley, 1981.

Block, J., in collaboration with Haan, N. Lives through time. Berkeley: Bancroft, 1971.

Bronson, W.C. Adult derivatives of emotional expressiveness and reactivity-control: Developmental continuities from childhood to adulthood. Child Development, 1967, 38, 801-817.

Bronson, W.C. The role of enduring orientations to the environment in personality development. Genetic Psychology Monographs, 1972, 86, 3-80.

Butler, R. The life review: An interpretation of reminiscence in the aged. Psychiatry, 1963, 26, 65-76.

Eichorn, D.H. The Berkeley longitudinal studies: Continuities and correlates of behaviour. Canadian Journal of Behavioural Science, 1973, 5, 298-320.

Eichorn, D.H. Samples and procedures. In D.H.Eichorn, J.A.Clausen, N.Haan, M.P.Honzik, and P.H.Mussen (Eds.) Present and past in middle life. New York: Academic Press, 1981.

Eichorn, D.H., Hunt, J.V., and Honzik, M.P. Experience, personality, and IQ: Adolescence to middle age. In D.H.Eichorn, J.A.Clausen. N.Haan, M.P.Honzik, and P.H. Mussen (Eds.) Present and past in middle life. New York: Academic Press, 1981.

Field, D. Retrospective reports by healthy intelligent elderly people of personal events of their adult lives. International Journal of Behavioral Development. 1981, 4 , 77-97.

Field, D. Stability of Personality Characteristics Throughout Adulthood. Paper presented at American Psychological Association, Washington, August 1982.

Gronback, H.H. Consistency and change of personality variables in late life. In H. Thomae (Ed.) Patterns of aging. Basel: Karger, 1976.

Kagan, J., and Moss, H.S. Birth to maturity. New York: Wiley, 1962.

Macfarlane, J.W. Studies in child guidance. I. Methodology of data collection and organization. Monographs of the Society for Research in Child Development, 1938, 28 (3, whole No. 87.)

McCrea, R.R., Costa, P.T., and Arenberg, D. Constancy of adult personality structure in males. Journal of Gerontology, 1980, 35 , 877-883.

Meredith, W. Personal communication. July 1983.

Mischel, W. Personality and assessment. New York: Wiley, 1968.

Mussen, P., Eichorn, D.H., Honzik, M.P., Bieber, S.L., and Meredith, W.M. Continuity and change in women's characteristics over four decades. International Journal of Behavioral Development, 1980, 3, 333-347.

Owens, W.A. Age and mental abilities: A second adult follow-up. Journal of Educational Psychology, 1966, 57 , 311-325.

Schaie, K. Warner. The Seattle longitudinal study: A twenty-one year exploration of psychometric intelligence in adulthood. In K. W. Schaie (Ed.), Longitudinal studies of adult development. New York: Guilford Press, 1981.

Siegler, I., George, L.K., and Okun, M. Cross-sequential analysis of adult personality. Developmental Psychology,1979, 15, 350-351.

Thomae, H. Patterns of "successful" aging. In H. Thomae (Ed.) Patterns of aging. Basel; Karger, 1976.

Thomae, H., Lehr, U., and Schmitz-Scherzer, R. Objective vs. subjective health in longitudinal perspective. Paper presented at the International Congress of Gerontology, Hamburg, July, 1981.

Tuddenham, R.D. The constancy of personality ratings over two decades. Genetic Psychology Monographs, 1959, 60, 3-29.

Table 1

Correlations Across Three Life Stages

Cognitive Functions	WOMEN (40 yrs) YA-YO	WOMEN (53 yrs) YA-OO	WOMEN (13 yrs) N= 51 YO-OO	MEN (13 yrs) N= 21 YO-OO
1. Intelligence	***.54	*.26	*.31	**.58
2. Mental Alertness	***.61	.15	.16	.29
3. Speed of Mental Processes	*.34	.11	.12	***.65
4. Accuracy in Thinking	*.34	-.04	**.37	**.50
5. Use of Language	***.50	**.41	.23	.24
Personality-Social Characteristics				
6. Personal Appearance	.23	.24	.11	.09
7. Energy Output	**.57	.20	.08	.14
8. Freshness/Fatigue	.05	-.06	-.16	-.02
9. Restlessness	.22	*.30	-.04	*.46
10. Talkativeness	***.55	**.46	***.54	.31
11. Self-assurance, poise	*.36	.21	** .41	.32
12. Tendency to Criticize	.29	-.10	.18	.08
13. Tendency to Criticize Child	.03	*.34	*.26	.16
14. Cheerfulness	**.39	.08	.12	.07
15. Worrisomeness	.14	.10	*.24	.30
16. Excitability	.16	*.32	*.30	.26
17. Satisfaction with Lot	-.01	-.21	.03	.13
18. Interest in Child	.01	-.16	-.08	.05
19. Self-esteem	.13	.25	***.43	***.65
20. Open-mindedness	.08	-.21	**.35	-.26
21. Frankness in Discussion	.11	*.34	*.25	.19

Note: Correlations not corrected for attenuation

*** = $p \leq .001$

** = $p \leq .01$

* = $p \leq .05$

Table 2

Differences Across Three Life Stages for the Women

Young Adulthood to Young-Old Age	Means: YA	YO	t	df	p
Personal Appearance	3.30	2.60 #	3.80	42	.001
Freshness/Fatigue	4.16	2.96 #	3.72	24	.001
Restlessness	4.03	3.51 #	2.90	42	.006
Self-assurance	3.65	3.12 #	2.91	42	.006
Critical Of Things	4.17	3.44 #	3.25	24	.003
Excitability	3.67	3.26 #	2.33	42	.03
Self-esteem	4.28	3.64 #	2.40	24	.01
Open-minded	# 3.40	4.36	2.86	24	.01
Frankness In Discussion	# 2.91	4.16	4.03	24	.001
Young-Old to Old-Old Age	**YO**	**OO**			
Accuracy in Thinking	3.70	3.20 #	2.42	49	.02
Restlessness	# 3.56	4.86	4.96	49	.001
Critical of Things in General	# 3.67	4.67	4.39	48	.001
Worrisomeness	# 3.82	4.48	3.10	49	.003
Excitability	# 3.16	4.80	8.37	48	.001
Interest in Child	3.55	2.81 #	3.40	48	.001
Frankness in Discussion	3.92	3.52 #	2.03	47	.05

Note: # = the life stage that was rated to have "more" of the characteristic

Table 3

Differences Across Time for the Men
Young-Old vs. Old-Old

	Means: YO	OO	t	df	p
Intelligence	# 2.24	2.67	2.12	20	.05
Use of Language	# 2.62	3.62	3.51	20	.002
Restlessness	# 4.04	6.10	7.54	20	.001
Critical of Things in General	# 3.57	4.76	2.98	20	.007
Critical of Child	# 4.05	5.24	2.74	20	.02
Worrisomeness	# 4.14	5.10	3.30	20	.004
Excitability	# 3.90	5.76	8.39	20	.001
Self-esteem	3.95	2.80 #	3.41	20	.003
Interest in Child	3.10	2.24 #	3.52	19	.002

Note: # = the age that was rated to have "more" of the characteristic

Table 4

Comparison of Men and Women in Young-Old and Old-Old Age

	Means: Women	Men	t	df	p
Comparison in Young-Old Age					
Intelligence	2.94	2.24 #	3.01	70	.004
Mental Alertness	2.90	2.19 #	2.37	70	.02
Accuracy in Thinking	3.67	2.76 #	3.16	70	.002
Use of Language	3.10	2.62 #	2.00	70	.05
Excitability	# 3.18	3.90	2.91	69	.005
Satisfaction with Lot	3.37	2.71 #	2.61	70	.01
Interest in Child	# 3.55	3.95	1.91	69	.06
Comparison in Old-Old Age					
Mentally Alert	2.45	1.83 #	1.97	74	.05
Restlessness	# 4.91	5.92	2.90	75	.005
Worrisomeness	# 4.53	5.13	1.89	75	.06
Excitability	# 4.72	5.67	3.28	75	.002
Self-esteem	2.96	2.17 #	2.60	74	.01

Note: # = the group that was judged to have "more" of the characteristic

Table 5

Stationary Component Analysis: Varimax Rotation

Guidance Women: N = 24

Factors Stationary Over Three Time Periods

I		II		III		IV		V	
Intelligence	.45	Energy	.30	Restless	-.22	Energy	-.24	Energy	.29
Ment. Alert	.35	Restless	.35	Appearance	.36	Satisfaction	-.20	Critical	-.22
Speed	.29	Talkative	.44	Poise	.39	Critical Ch.	.63	Open Mind	.28
Accuracy	.39	Critical	.44	Worry	-.39	Interest Ch.	-.64	Frank	.37
Language	.44	Excitable	.49	Satisfaction	.29			Freshness	.51
Open Mind	.31			Self Esteem	.44			Cheerful	.48
				Open Mind	-.31				
				Frank	-.23				

Note: root mean square residual = .0637

Table 6

Stationary Component Analysis: Varimax Rotation

Women, N = 51

Factors Stationary over Two Time Periods: YO and OO

I		II		III		IV		V	
Intelligence	.38	Talkative	.28	Alert	.23	Critical	.47	Talkative	.33
Alert	.23	Worry	.32	Worry	-.23	Cheerful	-.28	Worry	-.46
Speed	.24	Excitable	.49	Open Mind	-.28	Critical Ch.	.55	Open Mind	.44
Accuracy	.41	Critical	.22	Appearance	.43	Satisfaction	-.38	Fresh	.25
Language	.43	Restless	.49	Poise	.39	Interest Ch.	-.28	Cheerful	.34
Talkative	-.32	Energy	.44	Satisfaction	.28			Frank	.46
Worry	.32			Self Esteem	.49				
Open Mind	.26								

Note: root mean square residual = .0580

Table 7

Stationary Component Analysis: Varimax Rotation

Men: N = 21

Factors Stationary over Two Time Periods: YO and OO

I		II		III		IV		V	
Intelligence	.42	Self Esteem	.23	Cheerful	-.30	Accuracy	.23	Speed	-.25
Alert	.38	Energy	.24	Appearance	.21	Self Esteem	-.25	Energy	-.43
Speed	.37	Freshness	.44	Critical	.24	Worry	.25	Worry	-.49
Accuracy	.35	Cheerful	.29	Open Mind	-.60	Critical	-.42	Appearance	-.23
Language	.35	Worry	-.34	Frank	-.54	Restless	-.26	Restless	-.46
Poise	.28	Satisfaction	.54			Talkative	-.51	Excitable	-.40
Self Esteem	.34	Interest Ch.	.32			Critical Ch.	-.45		

Note: root mean square residual = .0755

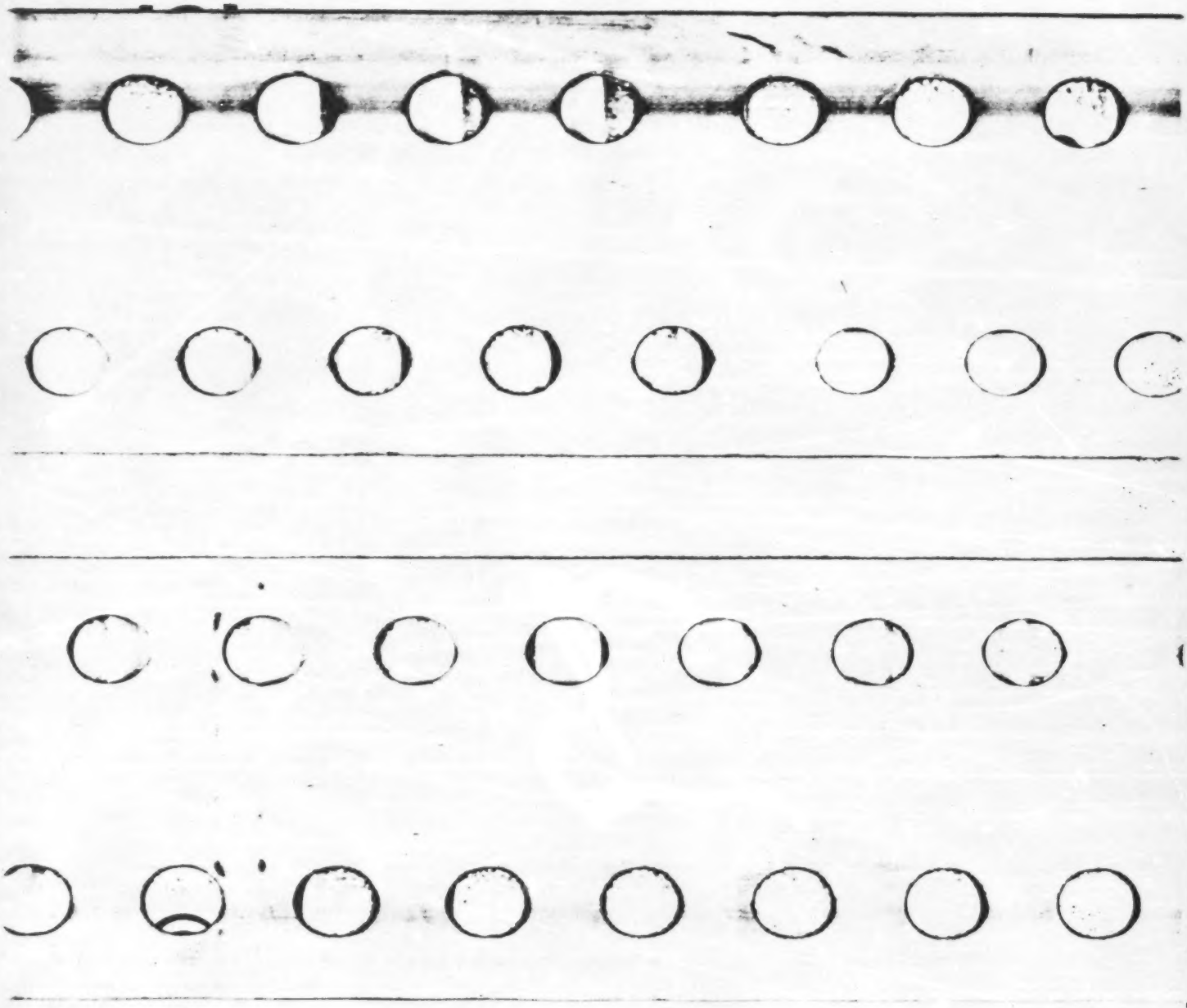
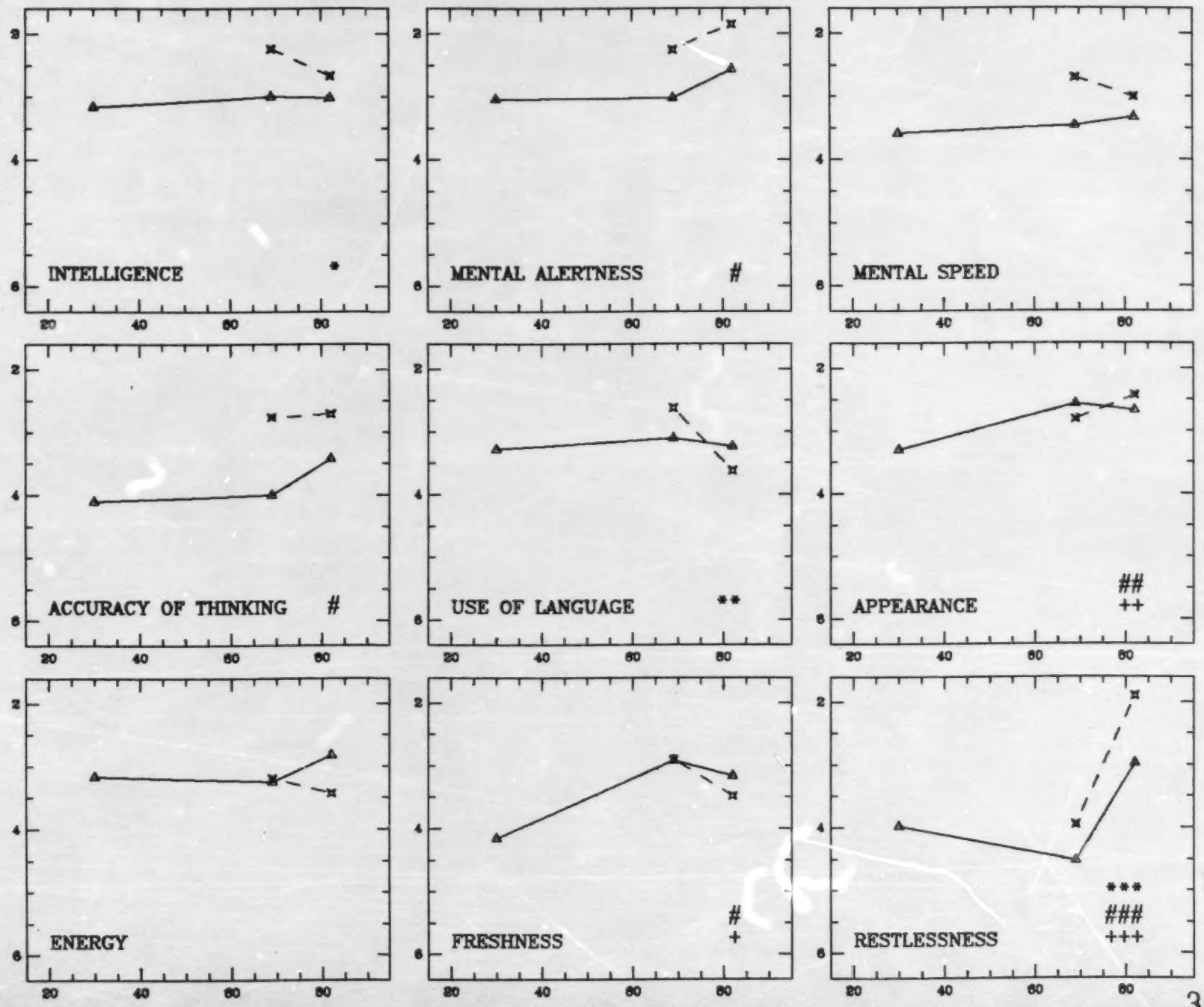
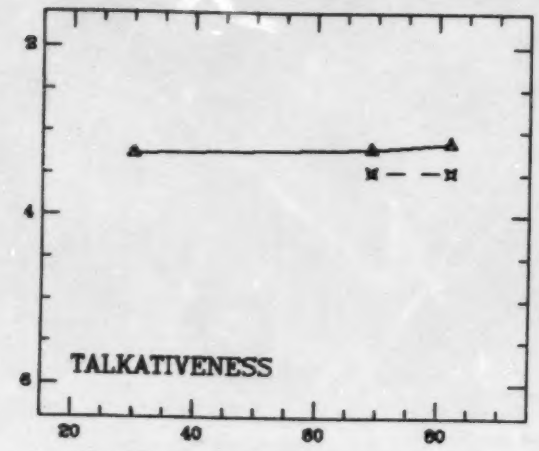
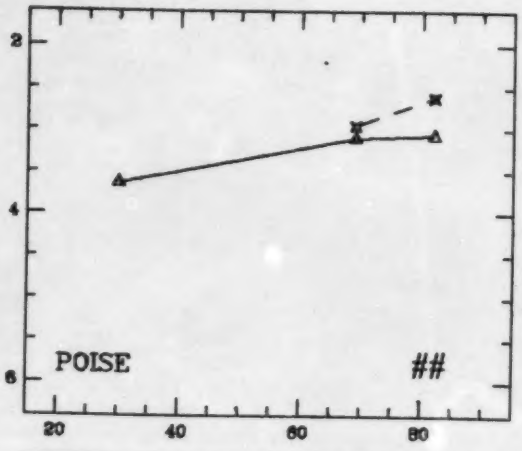
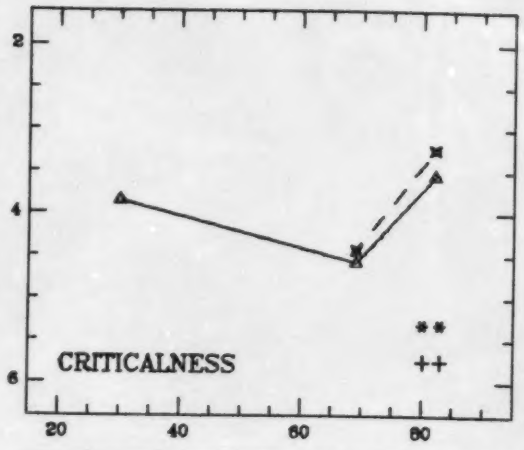


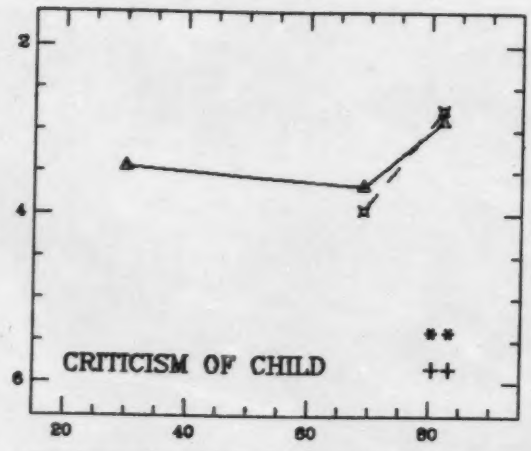
Figure 1: Means of Women at Three Life Stages and of Men in Young-old and Old-old Age.

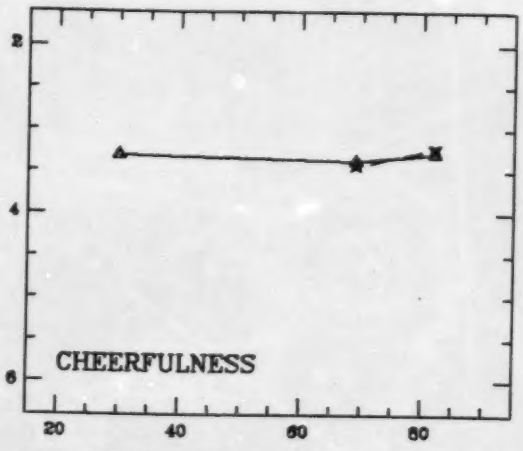


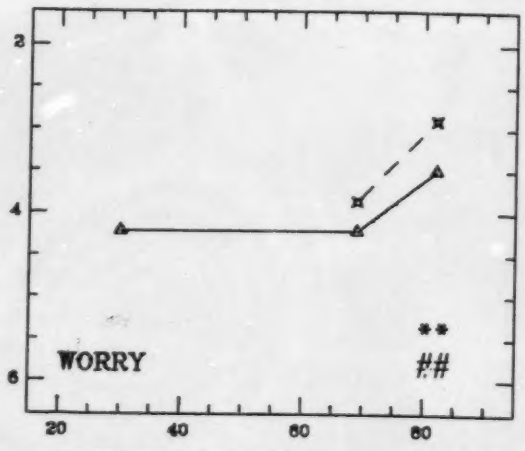

TALKATIVENESS
2
4
6
20
40
60
80

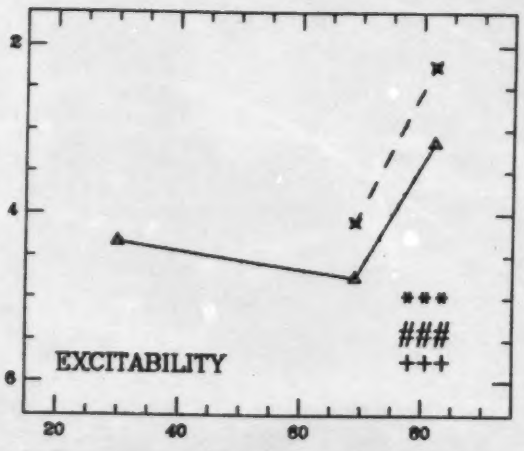

POISE
##
2
4
6
20
40
60
80

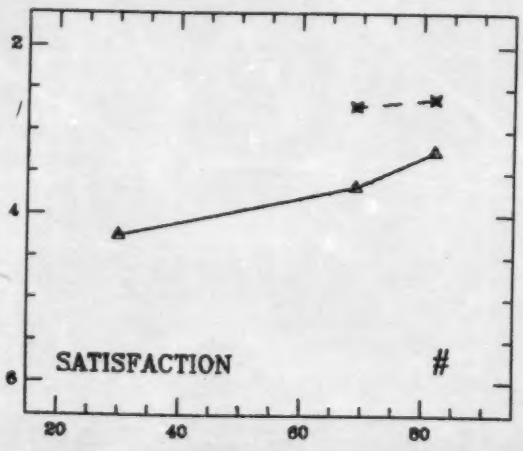

CRITICALNESS
**
++
2
4
6
20
40
60
80

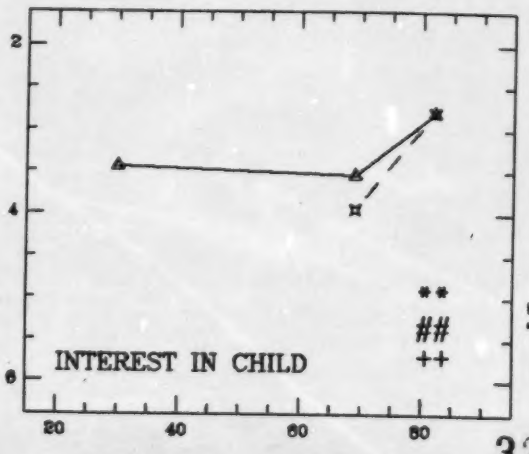

CRITICISM OF CHILD
**
++
2
4
6
20
40
60
80


CHEERFULNESS
2
4
6
20
40
60
80


WORRY
**
##
2
4
6
20
40
60
80


EXCITABILITY
***
###
+++
2
4
6
20
40
60
80

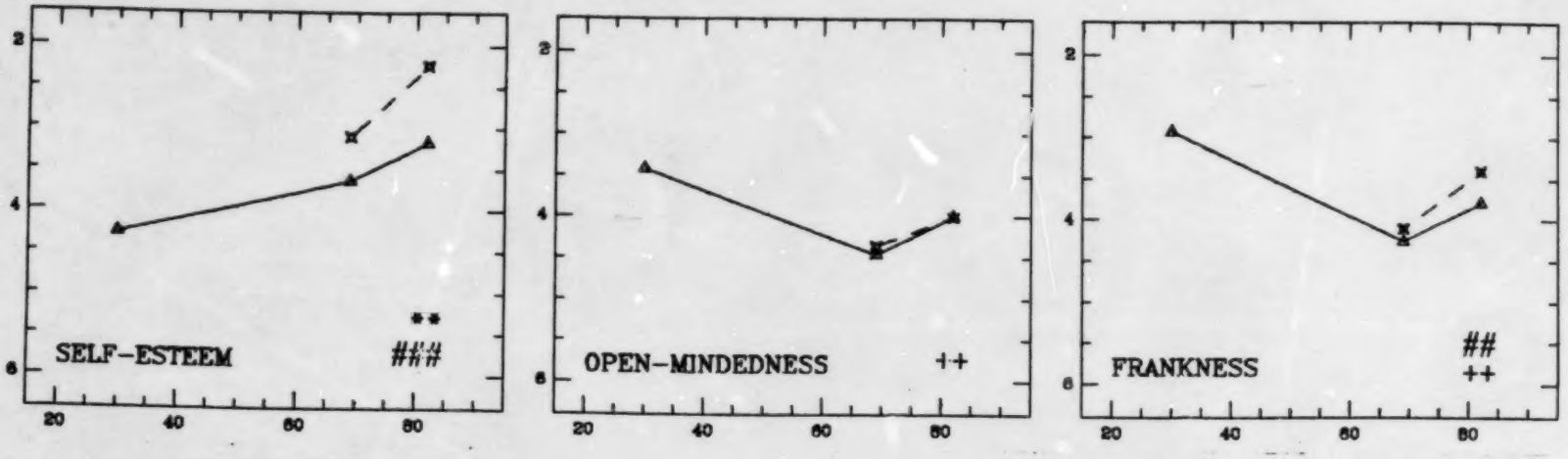

SATISFACTION
#
2
4
6
20
40
60
80


INTEREST IN CHILD
**
##
++
2
4
6
20
40
60
80

31

24

32



Note: Women: △

Men: ×

* = change for men, $p < .05$

** = change for men, $p < .01$

\# = linear trend for women, $p < .05$

\#\# = linear trend for women, $p < .01$

\+ = quadratic trend for women, $p < .05$

++ = quadratic trend for women, $p < .01$

In all cases the "best" end of the variable is highest on the graph.